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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,215	03/09/2004	Loc X. Phan	018563-001550US	4185
46718 7590 05/29/2008 TOWNSEND AND TOWNSEND AND CREW, LLP (018563) TWO EMBARCADERO CENTER, EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834				
EXAMINER BUMGARNER, MELBA N				
ART UNIT 3732		PAPER NUMBER		
MAIL DATE 05/29/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/797,215

Applicant(s)

PHAN ET AL.

Examiner

Melba Bumgarner

Art Unit

3732

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24, 25 and 28-37 is/are pending in the application.
- 4a) Of the above claim(s) 29-31 and 35-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24, 25, 28 and 32-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 29-31 and 35-37 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The entire application discloses components or accessories of independent entities included with the polymeric shell having a variety of features providing a variety of advantages. The elected species is described in the specification to specifically assist in holding the appliance in a desired position and the new claims recite the at least one protrusion or continuous protrusions are adapted to provide increased stability, to provide shortened treatment time, or to provide patient compliance. It is unclear whether the applicant is attempting to claim adaptability of the presently claimed feature that is not described in the specification or a different feature is suggested to the present feature to claim a new embodiment.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 29-31 and 35-37 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 32-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention. It is unclear what is meant by "a continuous terminus" as the specification does not describe the shell has having a pointed edge.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Parker (5,267,862). Parker discloses a removable elastic positioning appliance (column 10 line 20) comprising a shell having a hollow cavity shaped to receive teeth and capable of repositioning teeth, the shell having at least one protrusion 60 disposed along an edge of the hollow cavity (figure 10), as it is approximately the same distance from the edge of the hollow cavity as the claimed invention of figure 15B, which protrusion contacts a plurality of teeth to assist in holding the appliance in position (column 8 line 66), the at least one protrusion comprises continuous protrusion which is configured to fit in the undercut of the teeth (column 8 line 67) and to contact the teeth along the length of gingival margin and interdental areas. The appliance has at least one additional protrusion. It is the grooves in the cast that are used to make the protrusions.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 28 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker in view of Bergersen (5,645,420). Parker discloses an appliance that shows the limitations as described above; however, Parker does not show the protrusion mountable on the appliance. It would have been an obvious matter of choice to one of ordinary skill in the art as to how the protrusion is formed as the specification states that the protrusions may be sized, formed and located in any combination; however, Bergersen is used to show a mountable protrusion 60 on the appliance. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the protrusion mountable on the appliance in order to form the protrusion in the mouth of the patient in view of Bergersen. Parker discloses the shell having a channel with a first wall adapted to engage the buccal surface of the teeth and a second wall adapted to engage the lingual surface of the teeth, the walls each having an edge, a continuous protrusion disposed along the edge of the first wall; however, Parker does not show a continuous protrusion disposed along the edge of the second wall. Bergersen shows protrusion located on the wall adapted to engage the lingual surface of the teeth. It would have been obvious to one of ordinary skill in the art to have a second continuous protrusion, since a mere duplication of parts of an appliance involves only routine skill in the art.

Response to Arguments

8. Applicant's arguments filed February 20, 2008 have been fully considered but they are not persuasive. The prior art show the claimed structural limitations of the claims. It is believed that the claimed intended use in which the applicant further defines the parts of the dental structure, although it does not patentably distinguish the claims from the prior art, is shown in

Parker, such that Parker states that the height of contour of each tooth lies occlusal to the projections, which is the same as saying the projections lie in the undercut of each tooth, and that the grooves are cut adjacent to the gum line, which is understood as along the length of the gingival margin and interdental areas. Parker also states that the flex outward in the sides of the shell in the figure is exaggerated to better illustrate the attachment means. It is noted that undercut of each tooth is understood to be a region of the tooth and not a specific point, particularly in view of varying shapes and sizes of the anatomy of dentition and adjacent gum tissue.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to whose telephone number is 571-272-4709. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached at 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Melba Bumgarner/
Primary Examiner, Art Unit 3732